

## **DRAFT FINDING OF NO SIGNIFICANT IMPACT (FNSI) FOR THE SOIL RECYCLING FACILITY AT REDSTONE ARSENAL, ALABAMA**

Pursuant to the Council on Environmental Quality (CEQ) regulations (40 CFR 1400-1508) for implementing the procedural provisions of the National Environmental Policy Act (42 U.S.C. 4321 et seq.) and the U.S. Department of the Army Regulation 32 CFR 651 (Environmental Analysis of Army Actions; Final Rule), the U.S. Army Garrison - Redstone conducted an Environmental Assessment (EA) of the potential environmental effects associated with the recycling of petroleum, oil and lubricants (POL)-containing soils generated on the installation.

### **Purpose and Need**

Approximately 1,500 cubic yards of POL-containing soil are currently managed in stockpiles in heavily used areas of high visibility at Redstone Arsenal. The U.S. Army Garrison - Redstone needs a facility away from heavily used areas, where POL-containing soils would be recycled in a more secure manner. Additionally, POL tankfarm investigations, decommissioning, demolition operations and spill response activities at other locations will require POL-containing soil remediation activities.

### **Description of the Proposed Action**

The U.S. Army Garrison - Redstone proposes to recycle POL-containing soils on the installation by transporting excavated soils to a centralized soil recycling facility (SRF) where active management measures would be used to reduce the POL content in soil from non-underground storage tank sources to less than 100 parts per million (ppm) of Total Petroleum Hydrocarbons (TPH). The active management measures would include mixing fertilizer, potable water, and a commercial microbial agent into the POL-containing soils and maintaining adequate soil moisture control to promote microbial POL degradation. After the appropriate TPH level is obtained, soils would be reused as Construction and Demolition (C&D) landfill cover material.

### **Alternatives Considered**

Two alternatives have been considered for the proposed action - the preferred alternative and a no action alternative. Under the no action alternative, the U.S. Army Garrison - Redstone would continue to dispose of all excavated POL-containing soils off-post at the City of Huntsville landfill.

### **Preferred Alternative**

The SRF would be constructed in two phases. In Phase I, components of a canopy above the former sludge drying beds at inactive Sewage Treatment Plant (STP) #3 south of Martin Road and east of Indian Creek would be disassembled and moved to Borrow Area #16 (BA 16), north of the C&D landfill. Below ground portions of the canopy would be left in place at the STP. Disassembly would not disturb the subsurface since only the aboveground portion of the canopy will be removed.

Concrete pads, retaining walls, interceptor trenches, and sumps would be constructed in BA 16. The STP #3 canopy and a new canopy would be placed over the appropriate portions of the concrete pads. Power and lighting would be installed, along with a water line to provide potable water for the soil wetting sprinkler system. Phase II of the SRF would consist of the same construction as Phase I but would not involve disassembly and reuse of any equipment or structures. SRF-recycled soil no longer classified as POL-containing soil would be stockpiled to the north of the processing pads and access road. The total project footprint, including an asphalt access road that is to be constructed and a stockpile area for recycled soil, would be approximately 1.5 acres. The length of the new access road would be a minimum of 330 feet.

POL-containing soils would be placed in windrows on each 1 percent sloped, concrete treatment pad with open ends and retaining walls, and covered by an overhead metal canopy. Fertilizer would be mixed with the periodically wetted soil to stimulate biodegradation of the volatile and semi-volatile organic compounds (VOCs and SVOCs). Oily water mixtures that drain from the process into a sand/gravel filter pack within interceptor

trenches and then into sumps would be circulated and sprayed back onto the POL-containing soil pile. Once the TPH level is less than 100 ppm, recycled soil would then be reused as a landfill cover material.

### **Environmental Effects**

The EA, which is incorporated by reference into this FNSI, examined the potential effects of the proposed action on fourteen areas of environmental concern: air quality, health and safety, biological resources, cultural resources, waste and materials management, geology and soils, transportation, utility systems, land use, noise, socioeconomics, water resources and cumulative impacts.

There would be short-term and long-term minor adverse effects to air quality from implementing the preferred alternative. Potential short-term minor adverse effects to soils and surface water resources could occur. Over time, the preferred alternative could result in substantial beneficial effects to installation solid waste management programs. None of the impacts to air quality, soils or surface water would be significant. No impacts would occur to the other environmental resources. As part of the proposed action, U.S. Army Garrison - Redstone would implement appropriate mitigation measures, as identified in the EA. Mitigation actions would be necessary for air quality, cultural resources, soils and surface water.

### **Conclusion**

Based on the EA, it has been determined that the preferred alternative would have no significant direct, indirect, or cumulative impacts on the quality of the natural or human environment. Since no significant environmental impacts will result from the proposed action, an Environmental Impact Statement is not required and will not be prepared.

### **Public Comment**

The Draft EA is available for review and comment for 30 days from the date of this statement. Copies of the Draft EA may be obtained by contacting Ms. Lira Frye at the U.S. Army Garrison - Redstone Public Affairs Office, (256) 955-9173, ATTN: IMSE-RED-PA, Redstone Arsenal, Alabama 35898-5000 or by accessing the U.S. Army Garrison - Redstone webpage at <http://www.environmental.redstone.army.mil>. Comments on the Draft EA and FNSI should be submitted by mail or by electronic mail via the webpage link no later than March 15, 2006.